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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,363	04/25/2001	Ahmad Ansari	7780/13 (T00341)	6562

7590 07/28/2005
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EXAMINER

RAMAN, USHA

ART UNIT	PAPER NUMBER
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2617

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/842,363		ANSARI ET AL.	
	Examiner		Art Unit	
	Usha Raman		2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. Applicant's arguments filed May 13th, 2005 have been fully considered but they are not persuasive.

Applicant argues that Radford does not teach the step of storing a complete copy of the video at the client device. The examiner respectfully disagrees. Radford teaches the step of recording received signals (see [0016]), where the signals maybe received at any of the quality levels. Therefore it is within the scope of the Radford's system, the user to record (i.e. download and store) a complete copy of the video, in the low quality. Furthermore, DeBey is relied upon for teaching the step of pre-caching data during off peak hours, to further reduce peak time bandwidth. Applicant also argues that "Hassan is limited to image data, and does not disclose any methods or system for use with video". Examiner asserts that it is well known to extend the principles taught by Hassan to other types of multimedia data, including audio (also disclosed by Hassan, US Pat. 5,974,376) and video (also disclosed by Ortega, "Optimization techniques for adaptive quantization of image and video under delay constraints", page 132). As a result, the examiner maintains rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3, 6-8, 10, 11, 15-17, 21, and 23-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Radford et al. (US Pre Grant Pub. 2002/0144276).

In regards to claims 1, 11 and 21, Radford discloses a method of downloading video content representing a program to a subscriber terminal, comprising:

Decomposing video content into a plurality of video quality portions (see [0008] and [0009]), a low quality video portion of the plurality of video quality portions comprising a complete copy of the video (i.e. content clip) at a video quality lower than at least one of the plurality of audio quality portions (plurality of quality levels, necessarily requires one quality level to be lower than the other)

Downloading a complete copy of the low quality video portion to the subscriber terminal for storage locally at the subscriber terminal (see [0016], the client device is capable of recording data, therefore capable of storing the complete low quality video portion).

Receiving from the subscriber terminal a selection request for the program corresponding to the video content (see [0018]);

Downloading at least one of the plurality of video quality portions having a video quality higher than the low quality video portion to the subscriber in response to the selection request (see [0009]).

In regards to claim 3, the system further comprises the step of compressing the video content (See Radford: [0024]).

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In regards to claims 6 and 15, at least one of the plurality of video quality portions has a quality higher than the low quality video portion downloaded to the subscriber terminal in real time (see Radford: [0031]).

In regards to claims 7 and 16, the system further comprises the step wherein each of the video quality portions represents a different level of service quality (see Radford: [0025]);

In regards to claims 8, 17, 23, 24, the system further comprises the steps of:
Determining a download bandwidth available to the subscriber terminal (see Radford: [0024]).

Selecting the at least one of plurality of video quality portions having a quality higher than the low quality video portion based on the download bandwidth (see Radford: [0024], [0025]).

In regards to claim 10, the system further comprises the step of recomposing a plurality of downloaded video quality portions (using "time pointers") representing the program at the subscriber terminal for presenting the content to a user (see Radford: [0009]).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 9 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Radford et al. (US Pre Grant Pub. 2002/0144276) as applied to claims 7 and 21 above, and further in view of Hassan et al. (US Pat. 5,940,117)

In regards to claims 9 and 22, Radford does not disclose the step of organizing portions in a pyramidal scheme.

Hassan teaches the step of transmitting a first base image and then provide the additional image details for recomposition at the subscriber terminal, in order to provide a higher resolution of image. Such a signal decomposition/recomposition method uses a pyramidal scheme, with incremental levels of resolution increasing the quality of the image. See abstract, column 1, lines 58-57, column 2, lines 1-35, and column 3, lines 3-9.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Radford with teachings of Hassan by using a pyramidal scheme, in order to further optimize the bandwidth.

6. Claim 4, 12-13, and 18-19, rejected under 35 U.S.C. 103(a) as being unpatentable over by Radford et al. (US Pre Grant Pub. 2002/0144276).

In regards to claims 4 and 13, Radford is silent as to the type of compression algorithm used.

Examiner takes official notice that it is well known to compress video using standard compression algorithms developed by the MPEG, that use transform based algorithms.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system to use an MPEG based compression algorithm in order to compress the video according to the well known compression standard.

In regards to claim 12, the modified system does not transmit the use of ADSL as means for connecting the user terminal to the network.

Examiner takes official notice that ADSL was well known at the time of the invention, used to connect subscriber terminals to network such as the Internet.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system by allowing a subscriber terminal to communicate with the video content provider using a ADSL communication line. The motivation is to use a transmission mode deployed over existing infrastructure (i.e. telephone lines) that allows for a higher downstream bandwidth.

In regards to claim 18, see claims 1, 11 and 12. In further regards to claim 18, modified system comprises client devices capable of recording or displaying streamed digital data (mobile telephones, PDAs, computers, display terminals, digital television and the link). See Radford [0016]. Therefore the client device also comprises a set top box.

In regards to claim 19, the modified system comprises the step of encoding files for variety of decoder formats. The client system therefore has a decoder for decompressing the compressed content file. See Radford: [0028].

7. Claims 5, 14, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Radford et al. (US Pre Grant Pub. 2002/0144276) as applied to claims 1, 11 and 18 above, and further in view of DeBey (US Pat. 5,701,582).

In regards to claims 5, 14 and 20, the modified system does not comprise the step of downloading the low quality video portion the subscriber terminal during off peak hours.

DeBey discloses the step of pre-caching movie clips during off peak hours in order to reduce bandwidth during peak hours. See column 11, lines 50-64.

It would have been obvious to one of ordinary skill in the art to modify the system to download the base signal during off peak hours, thereby further reducing the bandwidth consumed during the peak hours.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hassan (US Pat. 5,974,376) discloses the step of applying the pyramidal scheme on audio signal (i.e. a continuous multimedia data), for incrementally improving quality. Ortega "Optimization techniques for adaptive quantization of image and video under delay constraints", discloses the applying similar methods for incrementally increasing resolutions to image as well as video data (see Ortega, page 132).
9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usha Raman whose telephone number is (571) 272-7380. The examiner can normally be reached on Mon-Fri: 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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PRIMARY EXAMINER